

## Storm Data and Unusual Weather Phenomena - August 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<b>IOWA, Southwest</b>				
<b>FREMONT COUNTY --- 5.3 SSW PAYNE [40.60, -95.77], 5.7 W PERCIVAL [40.74, -95.91], 4.1 WNW BARTLETT [40.91, -95.85], 2.9 N BARTLETT [40.92, -95.77], 3.6 WNW HAMBURG [40.62, -95.72]</b>				
	08/01/10 00:00 CST		3K	Flood (due to Heavy Rain)
	08/18/10 17:30 CST		0	Source: Official NWS Observations
<p>This flooding carried over from June and July when heavy rain over much of eastern Nebraska and western Iowa during those months caused a prolonged period of flooding along the Missouri River, especially downstream of Omaha through Rulo. The river near Nebraska City climbed above flood stage early in the afternoon on June 11th and remained above flood stage for most of July and into August. River levels were held up by additional rains and increased releases from upstream reservoirs. The river at Nebraska City crested around or a little over 25 feet during the afternoon of June 16th and June 21st. During July the river at Nebraska City peaked around 22 feet during the evening of July 1 and in August a crest of around 21.5 feet was seen on the 5th. Flood stage is 18 feet. In western Iowa most of the flooding was confined to farmland along the river with most of the significant flooding occurring during June and July.</p>				
<b>MILLS COUNTY --- 5.5 NW FOLSOM [41.16, -95.89], 8.4 SSW PACIFIC JCT [40.91, -95.86], 6.0 W TABOR [40.90, -95.78], 5.2 N FOLSOM [41.17, -95.84]</b>				
	08/01/10 00:00 CST		3K	Flood (due to Heavy Rain)
	08/18/10 17:30 CST		0	Source: Official NWS Observations
<p>This flooding carried over from June and July when heavy rain over much of eastern Nebraska and western Iowa during those months caused a prolonged period of flooding along the Missouri River downstream of Omaha through Rulo. In Plattsmouth the Missouri River crested a little over 33 feet in the late afternoon of June 22nd, flood stage is 26 feet. During July the river crested close to 29.5 feet in the afternoon of July 1 and a crest of around 29 feet was observed during the first week of August. The river climbed above flood stage in the afternoon of June 11 and remained close to or above flood stage most of July into August. Several mobile home and camping communities along the river were flooded, including some trailers and mobile homes. Roads near the river were also flooded, although the more significant flooding was seen in June and July.</p>				
<b>POTTAWATTAMIE COUNTY --- 5.8 WNW GRABLE [41.49, -96.03], 2.1 SSW GRABLE [41.44, -95.94], 1.3 W CARTER LAKE [41.30, -95.89], 4.2 SSW COUNCIL BLUFFS ARPT [41.21, -95.95], 2.3 WSW LAKE MANAWA [41.21, -95.89], 3.1 NE CARTER LAKE [41.33, -95.83], 1.8 ESE GRABLE [41.46, -95.89]</b>				
	08/01/10 00:00 CST		1K	Flood (due to Heavy Rain)
	08/17/10 00:00 CST		0	Source: Official NWS Observations
<p>Lowland flooding from heavy rain over much of eastern Nebraska and western Iowa during most of June carried over through much of July into August along the Missouri River in the Omaha area. The high waters occasionally flooded Wilson Island Park and also crossed a few roads by the river. Rising water also periodically flooded a riverboat casino's parking lot and lower level of the parking garage. Although the river never reached official flood stage in Omaha it periodically rose toward it.</p>				
<p><b>Heavy rain in June and July combined with increased releases from upstream reservoirs caused prolonged flooding along the Missouri River from around Omaha downstream through Rulo. The flooding started in June and continued into August.</b></p>				
<b>(IA-Z079) MILLS, (IA-Z080) MONTGOMERY, (IA-Z090) FREMONT, (IA-Z091) PAGE</b>				
	08/02/10 13:00 CST		0	Heat
	08/02/10 19:00 CST		0	
<p>Temperatures reached the lower to mid 90s during the afternoon and early evening of August 2nd across southwest Iowa. When combined with dew point temperatures in the upper 70s to lower 80s, heat index values climbed into the 105 to 115 degree range for several hours.</p>				
<b>POTTAWATTAMIE COUNTY --- 0.7 N UNDERWOOD [41.39, -95.68]</b>				
	08/03/10 20:41 CST		0	Hail (1.75 in)
	08/03/10 20:41 CST		0	Source: Law Enforcement
<b>MILLS COUNTY --- 1.3 ESE HASTINGS [41.01, -95.50]</b>				
	08/03/10 21:44 CST		0	Thunderstorm Wind (EG 52 kt)
	08/03/10 21:44 CST		0	Source: Trained Spotter

A spotter estimated a thunderstorm wind gust of 60 mph.

Thunderstorms developed across eastern Nebraska and southwest Iowa during the evening of Aug. 3rd north of a weak stationary front. One storm that tracked across the southern part of Omaha and northern Sarpy county dropped very large hailstones, some as large as baseballs. Although the reported hail size in western Iowa was smaller, some as large as golf balls fell near Underwood from

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
that storm.				
<b>(IA-Z055) HARRISON, (IA-Z056) SHELBY, (IA-Z069) POTTAWATTAMIE, (IA-Z079) MILLS, (IA-Z080) MONTGOMERY, (IA-Z090) FREMONT, (IA-Z091) PAGE</b>				
	08/08/10 12:00 CST		0	Excessive Heat
	08/12/10 20:00 CST		0	
<b>(IA-Z043) MONONA</b>				
	08/08/10 13:00 CST		0	Heat
	08/12/10 19:00 CST		0	
<p>A ridge of high pressure aloft over the plains allowed a prolonged period of hot and very humid conditions to persist across eastern Nebraska and southwest Iowa for a large part of the second week of August. Daytime highs over much of the area reached the 90s with dew point temperatures often in the 75 to 80 degree range. This created heat index values that often reached around 105 to 110 degrees and sometimes 115 or hotter. The highest heat index values during this period were near and south of Omaha toward Falls City and then into extreme southwest Iowa where afternoon values often reached 110 or higher during this stretch.</p>				
<b>MONONA COUNTY --- WHITING [42.13, -96.15]</b>				
	08/08/10 19:45 CST		0	Thunderstorm Wind (EG 55 kt)
	08/08/10 19:45 CST		0	Source: Emergency Manager
<p>Thunderstorm wind gusts estimated at over 60 mph caused considerable tree damage in the Whiting area which damaged a few buildings. The winds also broke at least one center pivot in the area.</p>				
<b>HARRISON COUNTY --- 2.1 N RIVER SIOUX [41.83, -96.05]</b>				
	08/08/10 20:55 CST		0	Thunderstorm Wind (EG 56 kt)
	08/08/10 20:55 CST		0	Source: COOP Observer
<p>The coop observed near Little Sioux estimated thunderstorm wind gusts of between 60 and 65 mph.</p>				
<p>Scattered strong to severe thunderstorms developed on a wind shift boundary over the Nebraska sandhills during the afternoon of August 8th. With temperatures in the 90s and dew point temperatures in the 70s ahead of the thunderstorms, the extremely unstable conditions allowed the thunderstorms to maintain their intensity as they tracked across northeast Nebraska into west central Iowa during the afternoon and evening of August 8th.</p>				
<b>POTTAWATTAMIE COUNTY --- TREYNOR [41.23, -95.62]</b>				
	08/10/10 22:05 CST		0	Thunderstorm Wind (EG 52 kt)
	08/10/10 22:05 CST		0	Source: Newspaper
<p>Thunderstorm wind gusts estimated at 60 mph downed or split several large trees in town along with causing other tree damage.</p>				
<b>POTTAWATTAMIE COUNTY --- OAKLAND [41.32, -95.40]</b>				
	08/10/10 22:10 CST		0	Thunderstorm Wind (EG 52 kt)
	08/10/10 22:10 CST		0	Source: Emergency Manager
<p>Thunderstorm wind gusts estimated at 60 mph downed a few tree limbs in town.</p>				
<p>A small cluster of thunderstorms developed during the early evening of August 10 southwest of Beatrice on a weak boundary that mainly proved to be a wind shift. Temperatures and dew point temperatures were in the lower to mid 90s and mid 70s respectively on both sides of the boundary providing extremely unstable conditions. One of the thunderstorms periodically produced damaging winds as it pulsed between severe and non-severe from southeast Nebraska into southwest Iowa.</p>				
<b>FREMONT COUNTY --- 0.7 N HAMBURG [40.61, -95.65]</b>				
	08/31/10 15:45 CST		0	Hail (0.75 in)
	08/31/10 15:45 CST		0	Source: Trained Spotter
<b>PAGE COUNTY --- 2.2 WSW COIN [40.66, -95.27]</b>				
	08/31/10 17:30 CST		0	Hail (1.00 in)
	08/31/10 17:30 CST		0	Source: Law Enforcement
<p>The hail was accompanied by torrential rain and wind gusts of 40 to 45 mph.</p>				
<p>An unstable air mass in southwest Iowa and a moderately strong low level jet helped thunderstorms develop ahead of a cold front in</p>				

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
southwest Iowa. The storms produced at least one report of large hail in southwest Iowa but also produce very heavy rainfall from near Hamburg east to around Coin where radar estimated that 3 to 4 inches of rain fell across parts of that area.				

### NEBRASKA, East

**CASS COUNTY --- 1.8 NNW PLATTSMOUTH [41.04, -95.91], 3.9 S UNION [40.77, -95.89], 6.3 ESE UNION [40.78, -95.79], 6.7 E MURRAY [40.93, -95.79], 3.7 NE PLATTSMOUTH [41.05, -95.84]**

08/01/10 00:00 CST	5K	Flood (due to Heavy Rain)
08/18/10 17:30 CST	0	Source: Official NWS Observations

This flooding carried over from June and July when heavy rain over much of eastern Nebraska and western Iowa during those months causing a prolonged period of flooding along the Missouri River, especially downstream of Omaha through Rulo. Although the river at Plattsmouth dropped below flood stage on July 8th, it remained high all of July climbing back above flood stage in the middle of the month and again several times late in the month into August. In Plattsmouth, the Missouri River crested a little over 33 feet in the late afternoon of June 22nd, flood stage is 26 feet. A July crest of around 29.5 feet was observed on the first with a crest of around 29 feet in August was seen on the 4th. Some roads on the east end of Plattsmouth were closed due to flood waters which also submerged the land around a waste-water treatment plant which prompted sandbagging. A recreation area in the region was also partially submerged in flood waters. Most of the damage and more significant flooding was observed in June and July.

**DOUGLAS COUNTY --- 1.1 WNW EAST OMAHA [41.38, -95.97], 2.4 SE ALBRIGHT [41.19, -95.94], 2.9 ESE SOUTH OMAHA [41.22, -95.90], 2.2 E (OMA)EPPLEY FLD OMAH [41.31, -95.86], 1.9 NE EAST OMAHA [41.39, -95.92]**

08/01/10 00:00 CST	20K	Flood (due to Heavy Rain)
08/17/10 00:00 CST	0	Source: Official NWS Observations

This flooding carried over from June and July after persistent and heavy rains during those months combined with increased releases from Gavin's Point Dam and caused the Missouri River to approach its 29 foot flood stage several times in July and also in early August. The high water flooded some parks in the flood plain including N.P. Dodge park causing its closure. The high water continued into August and eventually prompted the closure of N.P. Dodge Park for the season and causing 20,000 dollars in lost revenue for the city of Omaha.

**NEMAHA COUNTY --- 4.3 NW PERU [40.53, -95.78], 1.5 S NEMAHA [40.31, -95.67], 7.8 SE NEMAHA [40.25, -95.56], 11.3 ESE NEMAHA [40.27, -95.47], 5.4 NNE PERU [40.55, -95.69]**

08/01/10 00:00 CST	5K	Flood (due to Heavy Rain)
08/28/10 12:45 CST	0	Source: Official NWS Observations

Heavy rain over much of eastern Nebraska and western Iowa during most of June caused a prolonged period of flooding along the Missouri River, especially downstream of Omaha through Rulo. The river near Brownville climbed above flood stage during the afternoon on June 11th and remained above flood stage through July and for most of August. The prolonged flooding was aided by additional rain in July and increased releases from upstream reservoirs. The river at Brownville crested at close to 43 feet during the evening of June 23rd, flood stage is 32 feet. During July the river crested a little under 39 feet for the first several days of the month and in August the crest was a little over 38 feet on the 5th. Besides considerable flooding of lowlands along the river, several roads were flooded including one that lead to the Cooper Nuclear power plant. Recreation areas also sustained flood damage, but most of the damage was done in June and July.

**OTOE COUNTY --- 6.8 NNW NEBRASKA CITY ARPT [40.77, -95.90], 1.7 NNW NEBRASKA CITY ARPT [40.69, -95.88], 5.9 ESE PAUL [40.53, -95.78], 6.2 ESE NEBRASKA CITY [40.61, -95.74], 6.1 N NEBRASKA CITY ARPT [40.76, -95.86]**

08/01/10 00:00 CST	5K	Flood (due to Heavy Rain)
08/18/10 17:30 CST	0	Source: Official NWS Observations

Heavy rain over much of eastern Nebraska and western Iowa during most of June caused a prolonged period of flooding along the Missouri River, especially downstream of Omaha through Rulo. The river near Nebraska City climbed above flood stage early in the afternoon on June 11th and remained above flood stage for most of July into August. The flooding was aided by additional rains in July and increased releases from upstream reservoirs. The river at Nebraska City crested around or a little over 25 feet during the afternoon of June 16th and June 21st and started July out a little under 22 feet. The crest during August was almost 21.5 feet on the 5th. Flood stage is 18 feet. Industrial roads near the river were flooded along with some cabins, boat ramps and recreation areas, with most of the flooding damage observed in June and early July.

**RICHARDSON COUNTY --- 2.9 N BARADA [40.26, -95.58], 3.9 S RULO [39.99, -95.43], 8.5 ESE RULO [40.01, -95.28], 6.3 NE BARADA [40.28, -95.49]**

08/01/10 00:00 CST	5K	Flood (due to Heavy Rain)
08/21/10 02:00 CST	0	Source: Official NWS Observations

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
Heavy rain over much of eastern Nebraska and western Iowa during most of June caused a prolonged period of flooding along the Missouri River, especially downstream of Omaha through Rulo. The river at Rulo reached a record crest of around 26.6 feet during the evening of 6/24, flood stage is 17 feet. The river remained above flood stage through July and into August, with the high water aided by additional rains and increased releases from upstream reservoirs. A July crest of just under 23 feet late on the 5th was observed and an August crest of a little under 21 feet was measured on the 6th. Highway 159 near Rulo was closed for a time in June and July and substantial flooding of lowlands along the river occurred including cabins and recreation areas. At least 20 homes along the river were evacuated in June when flooding forced 30 to 40 people to find other shelter. Most of the damage and evacuations occurred in June and July.				

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<b>SARPY COUNTY --- 1.6 NNW AVERY [41.19, -95.94], 1.8 E AVERY [41.17, -95.90], 1.3 SW ST COLUMBANS [41.07, -95.90], 2.4 SSE ST COLUMBANS [41.05, -95.86], 2.3 E BELLEVUE [41.12, -95.86], 5.0 NE BELLEVUE [41.17, -95.83], 3.5 ENE AVERY [41.19, -95.87]</b>	08/01/10 00:00 CST		5K	Flood (due to Heavy Rain)
	08/17/10 00:00 CST		0	Source: Official NWS Observations

This flooding carried over from June and July when heavy rain over much of eastern Nebraska and western Iowa during those months causing a prolonged period of flooding along the Missouri River, especially downstream of Omaha through Rulo. Although the river at Plattsmouth dropped below flood stage on July 8th, it remained high all of July climbing back above flood stage in the middle of the month and again several times late in the month into August. Parks and a few roads were closed in Sarpy county along the Missouri River due to flood waters. In Plattsmouth, just south of Sarpy county, the Missouri River crested a little over 33 feet in the late afternoon of June 22nd, flood stage is 26 feet. A July crest of around 29.5 feet was observed on the first with a crest of around 29 feet in August was seen on the 4th.

**Heavy rain in June caused the Missouri River to flood from around Omaha downstream through Rulo. Additional heavy rains in July and increased releases from upstream reservoirs caused either high water or flooding to persist into August.**

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<b>PLATTE COUNTY --- 4.6 SE (OLU)COLUMBUS ARPT [41.40, -97.27]</b>	08/01/10 23:20 CST		0	Thunderstorm Wind (EG 50 kt)
	08/01/10 23:20 CST		0	Source: Emergency Manager

Thunderstorm wind gusts estimated at close to 60 mph blew the roof off of a farm outbuilding and a trailer house and also broke the window of a home. The time was estimated by radar.

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<b>DOUGLAS COUNTY --- 2.3 N BOYS TOWN [41.30, -96.13]</b>	08/02/10 02:15 CST		70K	Lightning
	08/02/10 02:15 CST		0	Source: Newspaper

A lightning strike caused a house fire in northwest Omaha.

**Scattered thunderstorms developed over northeast Nebraska during the late evening/early morning hours of August 1st and 2nd. The storms formed on the nose of a low level jet. An isolated storm east of Columbus produced wind damage, but the storms mainly dropped heavy rain with some locations around the Norfolk area receiving over 3 inches of rain.**

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<b>(NE-Z067) CASS, (NE-Z068) OTOE, (NE-Z088) JEFFERSON, (NE-Z089) GAGE, (NE-Z090) JOHNSON, (NE-Z091) NEMAHA, (NE-Z092) PAWNEE, (NE-Z093) RICHARDSON</b>	08/02/10 13:00 CST		0	Heat
	08/02/10 19:00 CST		0	

**Temperatures reached the 90s to around 100 degrees during the afternoon and early evening of August 2nd across southeast Nebraska. When combined with dew point temperatures in the upper 70s to lower 80s, heat index values climbed into the 105 to 115 degree range for several hours and in the southeast Corner of Nebraska they even briefly touch 120 degrees.**

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<b>DOUGLAS COUNTY --- 0.5 W ELKHORN [41.28, -96.24], 1.3 SE ALBRIGHT [41.20, -95.96]</b>	08/03/10 20:54 CST		0	Hail (3.00 in)
	08/03/10 21:30 CST		0	Source: NWS Employee

Hail up to 3 inches in diameter fell across sections of Omaha. Hail up to 1.5 inches in diameter was first observed in the Elkhorn area with 2.75 to 3 inch hail reported from 1010pm CDT through 1027pm near 114th and Center, 84th and F, 60th and L, and 72nd and Harrison Streets. The last report of large hail was in the Downtown area around 1030pm when quarter-size hail fell. The larger hailstones appeared to fall from the west central to southern parts of town, with nickel-size hail reported near 156th and Blondo Streets one of the larger hail reported north of Dodge Street. The hail damage was not widespread but one large insurance company stated that calls reporting damage from 43 homes and 63 autos came in by the next day. However, what damage did occur was significant and in some cases whole windshields were busted out along with large dents and significant siding damage to a few homes.

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<b>SARPY COUNTY --- 1.1 NNE PAPILLION [41.18, -96.04], 0.9 SE AVERY [41.16, -95.92]</b>	08/03/10 21:23 CST		0	Hail (3.00 in)
	08/03/10 21:40 CST		0	Source: Trained Spotter

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Hail up to 3 inches in diameter fell from the La Vista area southeast through Bellevue , especially the north part of that town. The larger hail in Sarpy county was reported in the La Vista area , with 2.5 inch hail reported in Papillion near 72nd and Giles and 1 to 1.5 inch hail reported in Bellevue. The hail caused scattered vehicle damage.				

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### SALINE COUNTY --- 0.5 W WILBER [40.48, -96.96]

08/03/10 22:03 CST	0	Hail (1.25 in)
08/03/10 22:03 CST	0	Source: Emergency Manager

Hail up to half dollar-size fell in the Wilber area causing minor damage to several vehicles and a few roofs.

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### GAGE COUNTY --- 2.2 ESE CLATONIA [40.46, -96.79]

08/03/10 22:25 CST	0	Hail (1.00 in)
08/03/10 22:25 CST	0	Source: Emergency Manager

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### JOHNSON COUNTY --- 0.9 NW TECUMSEH ARPT [40.44, -96.19]

08/03/10 23:13 CST	0	Thunderstorm Wind (EG 50 kt)
08/03/10 23:13 CST	0	Source: NWS Storm Survey

Thunderstorm wind gusts estimated at close to 60 mph downed or split a few 12 to 14 inch diameter tree limbs along with other smaller branches. Time was estimated based on radar.

Thunderstorms developed across eastern Nebraska and southwest Iowa during the evening north of a weak stationary front. One storm that tracked across the southern part of Omaha and northern Sarpy county dropped very large hailstones, some as large as baseballs.



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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
<i>Picture of hail in west central Omaha ranging up to 3 inches in diameter.</i>				
<b>(NE-Z011) KNOX, (NE-Z012) CEDAR, (NE-Z015) THURSTON, (NE-Z016) ANTELOPE, (NE-Z017) PIERCE, (NE-Z018) WAYNE, (NE-Z030) BOONE, (NE-Z031) MADISON, (NE-Z032) STANTON, (NE-Z033) CUMING, (NE-Z034) BURT, (NE-Z042) PLATTE, (NE-Z043) COLFAX, (NE-Z044) DODGE, (NE-Z050) BUTLER, (NE-Z088) JEFFERSON, (NE-Z089) GAGE</b>				
	08/08/10 12:00 CST		0	Heat
	08/12/10 19:00 CST		0	
<b>(NE-Z045) WASHINGTON, (NE-Z051) SAUNDERS, (NE-Z052) DOUGLAS, (NE-Z053) SARPY, (NE-Z065) SEWARD, (NE-Z066) LANCASTER, (NE-Z067) CASS, (NE-Z068) OTOE, (NE-Z078) SALINE, (NE-Z090) JOHNSON, (NE-Z091) NEMAHA, (NE-Z092) PAWNEE, (NE-Z093) RICHARDSON</b>				
	08/08/10 12:00 CST		0	Excessive Heat
	08/12/10 19:00 CST		0	
A ridge of high pressure aloft over the plains allowed a prolonged period of hot and very humid conditions to persist across eastern Nebraska and southwest Iowa for a large part of the second week of August. Daytime highs over much of the area reached the 90s with dew point temperatures often in the 75 to 80 degree range. This created heat index values that often reached around 105 to 110 degrees and sometimes 115 or hotter. The highest heat index values during this period were near and south of Omaha toward Falls City and then into extreme southwest Iowa where afternoon values often reached 110 or higher during this stretch. Several episodes of thunderstorm activity brought temporary relief to some areas during this stretch, mainly to northeast Nebraska.				
<b>KNOX COUNTY --- 16.0 W VERDIGRE [42.60, -98.34], VERDIGRE [42.60, -98.03]</b>				
	08/08/10 15:20 CST		0	Thunderstorm Wind (EG 55 kt)
	08/08/10 15:30 CST		0	Source: Public
Thunderstorm winds estimated at over 60 mph caused tree and other damage from around 16 miles west of Verdigre into Verdigre. Sixteen KV transmission lines/poles were downed 16 miles west of Verdigre causing loss of power in several surrounding towns for around 3 hours, with trees or large tree limbs downed from that location into Verdigre.				
<b>CEDAR COUNTY --- 3.1 NNE ATEN [42.84, -97.44]</b>				
	08/08/10 16:15 CST		0	Thunderstorm Wind (EG 60 kt)
	08/08/10 16:15 CST		0	Source: Emergency Manager
Thunderstorm wind gusts estimated at around 70 mph downed numerous trees and broke large limbs in the Nebraska Tailwaters campground just southeast of Gavins Point Dam.				
<b>KNOX COUNTY --- 1.7 NW BLOOMFIELD MUNI ARPT [42.60, -97.69]</b>				
	08/08/10 16:41 CST		0	Thunderstorm Wind (EG 52 kt)
	08/08/10 16:41 CST		0	Source: Public
The public estimated thunderstorm winds reached 60 mph which occurred with very heavy rain and near zero visibility.				
<b>PIERCE COUNTY --- 1.2 SW OSMOND [42.36, -97.60]</b>				
	08/08/10 17:01 CST		0	Thunderstorm Wind (EG 52 kt)
	08/08/10 17:01 CST		0	Source: Law Enforcement
Local law enforcement estimated thunderstorm wind gusts around 60 mph.				
<b>PIERCE COUNTY --- 9.7 SSW FOSTER [42.15, -97.74]</b>				
	08/08/10 17:30 CST		0	Thunderstorm Wind (EG 52 kt)
	08/08/10 17:30 CST		0	Source: Public
The public estimated a thunderstorm wind gust of around 60 mph.				
<b>BOONE COUNTY --- 0.9 NE PETERSBURG [41.86, -98.07]</b>				
	08/08/10 18:35 CST		0	Hail (1.25 in)
	08/08/10 18:35 CST		0	Source: Trained Spotter
<b>MADISON COUNTY --- 6.7 NNW NEWMAN GROVE [41.84, -97.83]</b>				
	08/08/10 18:57 CST		0	Hail (1.75 in)
	08/08/10 18:57 CST		0	Source: Law Enforcement

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A few hail stones reached golf ball-size.				
<b>THURSTON COUNTY --- 0.5 W WALTHILL [42.15, -96.49]</b>				
	08/08/10 19:20 CST		0	Thunderstorm Wind (EG 60 kt)
	08/08/10 19:20 CST		0	Source: Law Enforcement
Thunderstorm winds estimated at close to 70 mph downed numerous trees which downed power lines in the Walthill area . At least one tree fell on a car causing substantial damage.				
<b>MADISON COUNTY --- 1.5 NNW MADISON [41.85, -97.48]</b>				
	08/08/10 19:35 CST		0	Hail (1.00 in)
	08/08/10 19:35 CST		0	Source: Public
<b>MADISON COUNTY --- 0.9 NE MADISON [41.84, -97.46]</b>				
	08/08/10 19:38 CST		0	Hail (0.88 in)
	08/08/10 19:38 CST		0	Source: Law Enforcement
<b>CUMING COUNTY --- 0.9 NE WEST PT [41.84, -96.71]</b>				
	08/08/10 20:24 CST		0	Thunderstorm Wind (EG 56 kt)
	08/08/10 20:24 CST		0	Source: Broadcast Media
Thunderstorm wind gusts estimated at over 60 mph knocked power lines down causing loss of power to parts of town.				
<b>BURT COUNTY --- 0.7 S TEKAMAH ARPT [41.76, -96.18]</b>				
	08/08/10 20:56 CST		0	Thunderstorm Wind (MG 52 kt)
	08/08/10 20:56 CST		0	Source: ASOS
The Asos at Tekamah measured a thunderstorm wind gust of 60 mph.				
Scattered strong to severe thunderstorms developed on a wind shift boundary over the Nebraska sandhills during the afternoon of August 8th. With temperatures in the 90s and dew point temperatures in the 70s ahead of the thunderstorms, the extremely unstable conditions allowed the thunderstorms to maintain their intensity as they tracked across northeast Nebraska into west central Iowa during the afternoon and evening of August 8th.				
<b>GAGE COUNTY --- 2.1 SE ODELL [40.03, -96.77]</b>				
	08/10/10 18:28 CST		0	Hail (1.00 in)
	08/10/10 18:28 CST		0	Source: Public
The hail was accompanied by thunderstorm winds estimated at 70 mph that flattened corn in the area.				
<b>GAGE COUNTY --- 2.1 SSE ODELL [40.02, -96.79]</b>				
	08/10/10 18:28 CST		0	Thunderstorm Wind (EG 61 kt)
	08/10/10 18:28 CST		0	Source: Public
Thunderstorm winds estimated at 70 mph flattened corn in the area and was accompanied by 1 inch hail.				
<b>GAGE COUNTY --- 0.7 S BLUE SPGS [40.12, -96.67]</b>				
	08/10/10 18:50 CST		0	Thunderstorm Wind (EG 61 kt)
	08/10/10 18:50 CST		0	Source: Emergency Manager
Thunderstorm wind gusts estimated at 70 mph downed several trees in the area at least one of which fell onto a home.				
<b>JEFFERSON COUNTY --- 1.7 WNW HARBINE [40.21, -97.00]</b>				
	08/10/10 19:01 CST		0	Hail (0.88 in)
	08/10/10 19:01 CST		0	Source: Public
Mostly pea-size, but some up to nickel-size.				
<b>GAGE COUNTY --- 3.5 SW VIRGINIA [40.21, -96.54]</b>				
	08/10/10 19:10 CST		0	Thunderstorm Wind (EG 61 kt)
	08/10/10 19:10 CST		0	Source: Public

## Storm Data and Unusual Weather Phenomena - August 2010

Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
The public estimated thunderstorm wind gusts of 70 mph.				
<b>GAGE COUNTY --- 1.7 ENE HOAG [40.33, -96.80]</b>				
	08/10/10 19:23 CST		0	Thunderstorm Wind (EG 52 kt)
	08/10/10 19:23 CST		0	Source: Trained Spotter
A spotter estimated thunderstorm wind gusts reached 60 mph.				
<b>LANCASTER COUNTY --- 1.1 E ROCA [40.65, -96.63]</b>				
	08/10/10 20:10 CST		0	Thunderstorm Wind (EG 52 kt)
	08/10/10 20:10 CST		0	Source: Public
The public estimated thunderstorm wind gusts were around 60 mph.				
<b>CASS COUNTY --- 0.7 S CEDAR CREEK [41.02, -96.10]</b>				
	08/10/10 21:00 CST		0	Thunderstorm Wind (EG 52 kt)
	08/10/10 21:00 CST		0	Source: Trained Spotter
A spotter estimated a thunderstorm wind gust of 60 mph.				
<b>CASS COUNTY --- 1.6 E CULLOM [41.05, -96.02]</b>				
	08/10/10 21:14 CST		0	Hail (1.00 in)
	08/10/10 21:19 CST		0	Source: Trained Spotter
The hail lasted for 5 minutes and was accompanied by winds of around 40 mph.				
<b>CASS COUNTY --- PLATTSMOUTH [41.02, -95.90]</b>				
	08/10/10 21:20 CST		0	Thunderstorm Wind (EG 50 kt)
	08/10/10 21:20 CST		0	Source: Public
Thunderstorm wind gusts estimated at 55 to 60 mph downed a 4 inch in diameter tree limb.				
<b>SARPY COUNTY --- 0.7 NNW AVERY [41.18, -95.94], 0.7 S (OFF)OFFUTT AFB [41.11, -95.92]</b>				
	08/10/10 21:25 CST		0	Thunderstorm Wind (MG 64 kt)
	08/10/10 21:32 CST		0	Source: AWOS
The Automated weather sensor at Offutt AFB measured a thunderstorm wind gust of 74 mph. The winds downed numerous tree limbs and large trees with the Olde Towne area especially hard hit where at least 4 streets were blocked and several power poles were broken along with downed power lines. Some damage to homes and vehicles also occurred in this area. Around 1,700 people lost power for a while.				
<b>A small cluster of thunderstorms developed during the early evening of August 10 southwest of Beatrice on a weak boundary that mainly proved to be a wind shift. Temperatures and dew point temperatures were in the lower to mid 90s and mid 70s respectively on both sides of the boundary providing extremely unstable conditions. One of the thunderstorms periodically produced damaging winds as it pulsed between severe and non-severe from southeast Nebraska into southwest Iowa.</b>				
<b>ANTELOPE COUNTY --- 0.5 W CLEARWATER [42.17, -98.19]</b>				
	08/16/10 14:19 CST		0	Thunderstorm Wind (EG 52 kt)
	08/16/10 14:19 CST		0	Source: Trained Spotter
A spotter estimated thunderstorm winds of around 60 mph downed some small tree limbs.				
<b>ANTELOPE COUNTY --- NELIGH [42.13, -98.03]</b>				
	08/16/10 14:28 CST		0	Thunderstorm Wind (MG 65 kt)
	08/16/10 14:30 CST		0	Source: Storm Chaser
A storm chaser measured a thunderstorm wind gust of 75 mph on home weather equipment. The winds downed several 4 to 6 inch in diameter tree limbs in town.				
<b>Weak warm advection caused a small area of thunderstorms to develop in south central South Dakota early in the afternoon of August 16. One of the thunderstorms gained strength and turned severe producing damaging winds as it tracked southeast across the Neligh area. The storm then weakened as it encountered slightly more stable air.</b>				
<b>KNOX COUNTY --- 0.9 SE VERDEL [42.81, -98.19]</b>				



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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
	08/30/10 17:40 CST		0	Thunderstorm Wind (EG 60 kt)
	08/30/10 17:40 CST		0	Source: Trained Spotter

A spotter estimated thunderstorm winds gusted to nearly 70 mph. The strong winds downed large tree branches in the area.

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### ANTELOPE COUNTY --- 0.7 N BRUNSWICK [42.34, -97.97]

08/30/10 18:20 CST	0	Thunderstorm Wind (EG 56 kt)
08/30/10 18:20 CST	0	Source: Trained Spotter

A trained spotter estimated thunderstorm wind gusts reach around 65 mph in the area.

**Thunderstorms developed in central Nebraska ahead of a slow moving cold front during the afternoon of August 30th. The storms moved across northeast Nebraska during the evening hours and produced a few reports of severe criteria winds.**

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### GAGE COUNTY --- BARNESTON [40.05, -96.58]

08/31/10 16:43 CST	0	Hail (1.00 in)
08/31/10 16:43 CST	0	Source: Fire Department/Rescue

The thunderstorm also produced wind gusts estimated at 60 mph which downed large tree limbs in the area.

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### GAGE COUNTY --- 1.1 W BARNESTON [40.05, -96.60]

08/31/10 16:50 CST	0	Thunderstorm Wind (EG 52 kt)
08/31/10 16:50 CST	0	Source: Public

Thunderstorm wind gusts estimated at around 60 mph downed large tree limbs in the area. The winds were accompanied by hail around an inch in diameter.

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### GAGE COUNTY --- LIBERTY [40.08, -96.48]

08/31/10 16:55 CST	0	Thunderstorm Wind (EG 55 kt)
08/31/10 16:55 CST	0	Source: Public

Thunderstorm winds estimated at over 60 mph blew a 20 by 40 foot metal sheet from a farm shop building onto a neighbors tree. The time was estimated by radar but it was probably from the same storm that caused some tree damage just to the southwest near Barneston.

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### JEFFERSON COUNTY --- 3.7 W DAYKIN [40.32, -97.35]

08/31/10 17:10 CST	0	Hail (1.00 in)
08/31/10 17:10 CST	0	Source: Public

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### DOUGLAS COUNTY --- 0.9 NE WATERLOO [41.29, -96.29], 2.0 NE WATERLOO [41.30, -96.27]

08/31/10 21:00 CST	0	Hail (1.75 in)
08/31/10 21:08 CST	0	Source: Fire Department/Rescue

Hail around 1 inch in diameter was reported in the Waterloo area with golf ball-size reported just to the northeast of town.

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### DOUGLAS COUNTY --- 0.9 W VALLEY [41.32, -96.37]

08/31/10 21:08 CST	0	Hail (1.50 in)
08/31/10 21:08 CST	0	Source: Official NWS Observations

Hail up to 1.5 inches in diameter was measured at the NWS office just northwest of Valley. The hailstones were mostly 1/2 inch or smaller.

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### DOUGLAS COUNTY --- 0.5 W ELKHORN [41.28, -96.24]

08/31/10 21:12 CST	0	Hail (1.00 in)
08/31/10 21:12 CST	0	Source: NWS Employee

Hail around 1 inch in diameter was measured by an off duty NWS employee in the Elkhorn area near 208th and Maple Streets.

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### DOUGLAS COUNTY --- 2.7 ENE ELK CITY [41.38, -96.23]

08/31/10 21:21 CST	0	Hail (1.00 in)
08/31/10 21:21 CST	0	Source: Storm Chaser

Near the Jct of Highways 31 and 36.

**An unstable air mass in southeast Nebraska and southwest Iowa and a moderately strong low level jet helped thunderstorms develop**

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Location	Date/Time	Deaths & Injuries	Property & Crop Dmg	Event Type and Details
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ahead of a cold front in southwest Iowa with additional storms developing from northeast Kansas into southeast Nebraska. The storms produced some damaging winds and large hail and also isolated areas of very heavy rainfall. Later that evening a shallow cold front pushed into the region but winds above the front remained from the south or southwest which allowed isolated elevated storms to develop north of the front. One storm that moved just to the west of Omaha produced large hail before weakening.